



General

Guideline Title

ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients.

Bibliographic Source(s)

Kirsch J, Mohammed TH, Kanne JP, Chung JH, Donnelly EF, Ginsburg ME, Heitkamp DE, Henry TS, Kazerooni EA, Ketai LH, McComb BL, Ravenel JG, Saleh AG, Shah RD, Steiner RM, Suh RD, Expert Panel on Thoracic Imaging. ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients. [online publication]. Reston (VA): American College of Radiology (ACR); 2013. 7 p. [19 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Kirsch J, Ramirez J, Mohammed TH, Amorosa JK, Brown K, Dyer DS, Ginsburg ME, Heitkamp DE, Jeudy J, MacMahon H, Ravenel JG, Saleh AG, Shah RD, Expert Panel on Thoracic Imaging. ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients. [online publication]. Reston (VA): American College of Radiology (ACR); 2010. 8 p.

Recommendations

Major Recommendations

ACR Appropriateness Criteria®

Clinical Condition: Acute Respiratory Illness in Immunocompetent Patients

Variant 1: Older than age 40.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	8		<input type="text"/>
CT chest without contrast	4		<input type="text"/> <input type="text"/> <input type="text"/>
Rating Scale: 1,2 Usually not appropriate; 3,4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation

Radiologic Procedure	Rating	Comments	RRL*
CT chest without and with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 2: Dementia, any age.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	8		<input type="text"/>
CT chest without contrast	6	In patients without reliable follow-up or with a likelihood of morbidity if disease is not detected initially, a CT may be required in the setting of a negative chest x-ray.	<input type="text"/> <input type="text"/> <input type="text"/>
CT chest with contrast	3		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest without and with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 3: Younger than age 40, negative physical examination, and no other signs, symptoms, or risk factors.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	4		<input type="text"/>
CT chest without contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest without and with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Radiologic Procedure	Rating	Comments	RRL*
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Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 4: Younger than age 40 and positive physical examination or other risk factors.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	9		<input type="text"/>
CT chest without contrast	4		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest with contrast	3		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest without and with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 5: Complicated pneumonia.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	9		<input type="text"/>
CT chest without contrast	8	If pneumonia is not resolving or intervention is contemplated.	<input type="text"/> <input type="text"/> <input type="text"/>
CT chest with contrast	5		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest without and with contrast	2		<input type="text"/> <input type="text"/> <input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 6: Acute asthma, uncomplicated.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	4		<input type="text"/>
<u>Rating Scale:</u> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Radiologic Procedure	Rating	Comments	RRL*
CT chest without contrast	1		
CT chest with contrast	1		
CT chest without and with contrast	1		
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 7: Acute asthma and suspected pneumonia or pneumothorax.

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	9		
CT chest without contrast	2		
CT chest with contrast	1		
CT chest without and with contrast	1		
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 8: Acute exacerbation of COPD, "uncomplicated" (no history of coronary artery disease or congestive heart failure, no leukocytosis, fever, or chest pain).

Radiologic Procedure	Rating	Comments	RRL*
X-ray chest	4		
CT chest without contrast	2		
CT chest with contrast	1		

CT chest without and with contrast Radiologic Procedure	Rating	Comments	RRL* <input type="text"/> <input type="text"/>
			<input type="text"/>
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 9: Acute exacerbation of COPD with one or more of the following: leukocytosis, pain, history of coronary artery disease or congestive heart failure.

Radiologic Procedure	Rating	Comments	RRL* <input type="text"/>
X-ray chest	9		<input type="text"/>
CT chest without contrast	4		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest with contrast	3		<input type="text"/> <input type="text"/> <input type="text"/>
CT chest without and with contrast	1		<input type="text"/> <input type="text"/> <input type="text"/>
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Summary of Literature Review

Introduction/Background

Acute respiratory illness (ARI) is defined as one or more of the following: cough, sputum production, chest pain, or dyspnea (with or without fever). The workup of a patient with ARI, including the need for chest radiography and computed tomography (CT), depends on many factors, including severity of the illness; age of patient; presence of fever, leukocytosis, or hypoxemia; clinical history; presence of other risk factors; and physical examination. Not all studies concur as to which patients with ARI should have chest radiographs.

One study of 1,102 outpatients with ARI found patient age, the physical examination, and the presence or absence of hemoptysis to be important factors. Only 4% (7/175) of patients younger than age 40 with symptoms of ARI, a negative physical examination, and no hemoptysis had acute significant radiographic findings, whereas patients either older than age 40 with hemoptysis or with a positive physical examination, such as the presence of wheezing, had a much higher incidence of chest radiograph abnormalities. Another study of 464 patients with ARI also found a low incidence (3%) of pneumonia in patients with negative physical examinations. A notable exception was found for patients with dementia, in whom the incidence of pneumonia was very high regardless of the results of the physical examination. Another group of researchers studied 79 outpatients presenting with clinical suspicion of pneumonia and concluded that radiographs should be ordered only when patients present with fever, cough, sputum production, and coarse crackles on physical examination. Conversely, another study of 221 patients with ARI found that 77 (35%) had new clinically important findings. Furthermore, the clinical findings did not differ significantly between those with positive radiographic findings and those with negative findings (i.e., clinical history and physical examination were poor predictors of radiography-detected abnormalities). A study that evaluated 192 patients with a clinical suspicion of pneumonia by general practitioners found that the probability of pneumonia was changed by chest radiographic results in 53% of patients, with a decrease in probability in 47% and an increase in probability in 6%.

Pneumonia

In a series of 300 patients with acute cough illness, it was found that for patients with a high pretest probability of pneumonia, a radiograph was not always obtained in clinical practice; the study authors infer that when the clinical probability of pneumonia exceeds a certain level, a negative radiograph would not alter treatment decisions by clinicians. Another series that included 2,706 patients hospitalized with community-acquired pneumonia (CAP) similarly showed that 911 (one-third) of them had radiographs initially interpreted as negative for pneumonia, with minimal change in this interpretation on retrospective review of a random subgroup. The groups with positive and negative radiographs had similar rates of positive sputum cultures and blood cultures. These 2 studies call into question the utility of radiographs in patients with high pretest probability of pneumonia. Researchers developed a prediction rule for the use of chest radiographs in evaluating for CAP and in a 70-patient series, in both the outpatient and emergency setting. They concluded that chest radiographs are unnecessary in patients with normal vital signs and physical examination findings. However, because approximately 5% of cases would be missed, their criteria are only useful for patients with reliable follow-up and a low likelihood of morbidity if CAP is not detected initially. Another study showed that 21% of 105 patients hospitalized with a clinical diagnosis of CAP initially had negative chest radiographs, with over one-half of the 9 patients who had subsequent radiographic studies within 48 hours of hospitalization developing opacities.

Patients with substance abuse have an increased risk of ARI due to two potential conditions: respiratory pump failure and pulmonary pathology. Respiratory pump failure generally does not have radiographic manifestations. However pulmonary pathology includes multiple diagnosis with chest radiographic manifestations, including aspiration, pulmonary edema, pneumonia, hemorrhage, and septic emboli.

According to the guidelines of the Infectious Diseases Society of America and the American Thoracic Society, chest radiography should be obtained whenever pneumonia is suspected in adults to establish the diagnosis and to aid in differentiating CAP from other common causes of cough and fever, such as acute bronchitis. Findings on chest radiographs are one of several parameters used to determine: 1) which patients should be hospitalized (presence of pleural effusion); 2) which patients should be classified as having severe pneumonia (multilobar involvement); and 3) which patients may require additional diagnostic testing (cavitation, pleural effusion), including thoracentesis (pleural effusions >5 cm on lateral upright radiograph). CT may show findings in patients with normal radiographs, but the significance of these findings and therefore the utility of CT in patients with clinically suspected pneumonia and negative radiographs is unclear. One study found that in 27% of patients (out of 97) presenting to the emergency department with both a chest radiograph study and a CT scan performed in the workup of varied chief complaints, pneumonia was demonstrated on a CT scan in the face of a negative or nondiagnostic chest radiograph study. As in the study mentioned above, they recommend that when the chief complaint is fever, cough or chest pain in patients with serious comorbidities, obtaining a CT scan in the setting of a negative chest radiograph study would seem to be necessary.

Additionally, CT may play a role in the management of severe pneumonia. It can serve as a guide for pleural drainage or to localize an appropriate site for biopsy. However, its use for potentially differentiating bacterial and nonbacterial pneumonias remains limited. Severe pneumonias bear a strong relationship to etiologic pathogens and have implications for antimicrobial treatment. Patients with severe pneumonia should be considered as candidates for admission to an intensive care unit.

Asthma

The need for chest radiographs in adult patients with acute asthma is controversial. One group of researchers found clinically important (i.e., affecting patient management) radiographic findings in 9% of their patients and concluded that chest radiography is indicated. However, other researchers observed that 99% of their patients either had normal chest radiographic examinations or showed only slightly prominent markings or hyperinflation. Another study reported that patients with acute asthma rarely have pneumonia. Chest radiographs were recommended only when pneumonia or pneumothorax is suspected. Significant chest radiographic abnormalities were found in 34% of adults whose asthma exacerbation warranted admission to the hospital.

Chronic Obstructive Pulmonary Disease

The utility of chest radiography was studied in 242 patients with acute exacerbations of chronic obstructive pulmonary disease (COPD) (i.e., dyspnea). Of this group, 135 patients (56%) had asthma, and 107 (44%) had emphysema and chronic bronchitis. Chest radiographs were abnormal in 14% but resulted in significant change in management in only 4.5%. The authors of the study concluded that the chest radiograph is indicated only if the worsening dyspnea is accompanied by leukocytosis, chest pain, or edema or by a history of coronary artery disease or congestive heart failure (CHF).

It is estimated that bacterial infection is a factor in 70% to 75% of COPD exacerbations; up to 60% caused by *Streptococcus pneumoniae*, *Haemophilus influenzae* or *Moraxella catarrhalis*. The latter, a nosocomial respiratory tract pathogen, is the causative agent particularly in older adults. The CT findings of 109 patients with acute *M. catarrhalis* pulmonary infection were reviewed; the most common were ground-glass opacity followed by bronchial wall thickening, centrilobular nodules, consolidation and bronchiectasis with basal and peripheral predominance.

Summary

- Chest radiography seems warranted in ARI when one or more of the following are present: older than age 40; dementia; a positive physical examination; hemoptysis; associated abnormalities (leukocytosis, hypoxemia); or other risk factors, including coronary artery disease, CHF, or drug-induced acute respiratory failure.
- Chest radiography also seems warranted for any adult patient with clinical suspicion of pneumonia, although some clinicians may choose not to perform radiography if clinical suspicion of respiratory infection is sufficiently high to warrant treatment if a radiograph were to be negative.
- It appears that in patients with ARI who are younger than age 40, chest radiography is not routinely indicated unless there are other abnormalities, a positive physical examination, or other risk factors.
- It also appears that chest radiography is not indicated in most patients with exacerbations of COPD (including asthma) unless there is a suspected complication such as pneumonia or pneumothorax or unless one or more of the following are present: leukocytosis, chest pain, edema, or a history of coronary artery disease or CHF.
- Chest CT may be warranted in complicated cases of severe pneumonia and in febrile neutropenic patients with normal or nonspecific chest radiographic findings.

Abbreviations

- COPD, chronic obstructive pulmonary disease
- CT, computed tomography

Relative Radiation Level Designations

Relative Radiation Level*	Adult Effective Dose Estimate Range	Pediatric Effective Dose Estimate Range
O	0 mSv	0 mSv
<input type="checkbox"/>	<0.1 mSv	<0.03 mSv
<input type="checkbox"/> <input type="checkbox"/>	0.1-1 mSv	0.03-0.3 mSv
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1-10 mSv	0.3-3 mSv
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	10-30 mSv	3-10 mSv
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	30-100 mSv	10-30 mSv

*RRL assignments for some of the examinations cannot be made, because the actual patient doses in these procedures vary as a function of a number of factors (e.g., region of the body exposed to ionizing radiation, the imaging guidance that is used). The RRLs for these examinations are designated as "Varies."

Clinical Algorithm(s)

Algorithms were not developed from criteria guidelines.

Scope

Disease/Condition(s)

Acute respiratory illness,* including:

- Pneumonia
- Acute asthma
- Pneumothorax
- Acute exacerbation of chronic obstructive pulmonary disease (COPD)

*Acute respiratory illness is defined as one or more of the following: cough, sputum production, chest pain, or dyspnea (with or without fever).

Guideline Category

Diagnosis

Evaluation

Clinical Specialty

Family Practice

Internal Medicine

Pulmonary Medicine

Radiology

Intended Users

Health Plans

Hospitals

Managed Care Organizations

Physicians

Utilization Management

Guideline Objective(s)

To evaluate the appropriateness of initial radiologic examinations for acute respiratory illness in immunocompetent patients

Target Population

Immunocompetent patients with acute respiratory illness

Interventions and Practices Considered

1. X-ray chest
2. Computed tomography (CT) chest
 - Without contrast
 - With contrast
 - Without and with contrast

Major Outcomes Considered

Utility of radiologic procedures in differential diagnosis of pneumonia and other respiratory complications

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Literature Search Procedure

Staff will search in PubMed only for peer reviewed medical literature for routine searches. Any article or guideline may be used by the author in the narrative but those materials may have been identified outside of the routine literature search process.

The Medline literature search is based on keywords provided by the topic author. The two general classes of keywords are those related to the condition (e.g., ankle pain, fever) and those that describe the diagnostic or therapeutic intervention of interest (e.g., mammography, MRI).

The search terms and parameters are manipulated to produce the most relevant, current evidence to address the American College of Radiology Appropriateness Criteria (ACR AC) topic being reviewed or developed. Combining the clinical conditions and diagnostic modalities or therapeutic procedures narrows the search to be relevant to the topic. Exploding the term "diagnostic imaging" captures relevant results for diagnostic topics.

The following criteria/limits are used in the searches.

1. Articles that have abstracts available and are concerned with humans.
2. Restrict the search to the year prior to the last topic update or in some cases the author of the topic may specify which year range to use in the search. For new topics, the year range is restricted to the last 10 years unless the topic author provides other instructions.
3. May restrict the search to Adults only or Pediatrics only.
4. Articles consisting of only summaries or case reports are often excluded from final results.

The search strategy may be revised to improve the output as needed.

Number of Source Documents

The total number of source documents identified as the result of the literature search is not known.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Strength of Evidence Key

Category 1 - The conclusions of the study are valid and strongly supported by study design, analysis and results.

Category 2 - The conclusions of the study are likely valid, but study design does not permit certainty.

Category 3 - The conclusions of the study may be valid but the evidence supporting the conclusions is inconclusive or equivocal.

Category 4 - The conclusions of the study may not be valid because the evidence may not be reliable given the study design or analysis.

Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

The topic author drafts or revises the narrative text summarizing the evidence found in the literature. American College of Radiology (ACR) staff draft an evidence table based on the analysis of the selected literature. These tables rate the strength of the evidence (study quality) for each article included in the narrative text.

The expert panel reviews the narrative text, evidence table, and the supporting literature for each of the topic-variant combinations and assigns an appropriateness rating for each procedure listed in the table. Each individual panel member assigns a rating based on his/her interpretation of the available evidence.

More information about the evidence table development process can be found in the ACR Appropriateness Criteria® Evidence Table Development document (see the "Availability of Companion Documents" field).

Methods Used to Formulate the Recommendations

Expert Consensus (Delphi)

Description of Methods Used to Formulate the Recommendations

Rating Appropriateness

The appropriateness ratings for each of the procedures included in the Appropriateness Criteria topics are determined using a modified Delphi methodology. A series of surveys are conducted to elicit each panelist's expert interpretation of the evidence, based on the available data, regarding the appropriateness of an imaging or therapeutic procedure for a specific clinical scenario. American College of Radiology (ACR) staff distribute surveys to the panelists along with the evidence table and narrative. Each panelist interprets the available evidence and rates each procedure. The surveys are completed by panelists without consulting other panelists. The appropriateness rating scale is an ordinal scale that uses integers from 1 to 9 grouped into three categories: 1, 2, or 3 are in the category "usually not appropriate"; 4, 5, or 6 are in the category "may be appropriate"; and 7, 8, or 9 are in the category "usually appropriate." Each panel member assigns one rating for each procedure for a clinical scenario. The ratings assigned by each panel member are presented in a table displaying the frequency distribution of the ratings without identifying which members provided any particular rating.

If consensus is reached, the median rating is assigned as the panel's final recommendation/rating. Consensus is defined as eighty percent (80%) agreement within a rating category. A maximum of three rounds may be conducted to reach consensus. Consensus among the panel members must be achieved to determine the final rating for each procedure.

If consensus is not reached, the panel is convened by conference call. The strengths and weaknesses of each imaging procedure that has not reached consensus are discussed and a final rating is proposed. If the panelists on the call agree, the rating is proposed as the panel's consensus. The document is circulated to all the panelists to make the final determination. If consensus cannot be reached on the call or when the document is circulated, "No consensus" appears in the rating column and the reasons for this decision are added to the comment sections.

This modified Delphi method enables each panelist to express individual interpretations of the evidence and his or her expert opinion without excessive influence from fellow panelists in a simple, standardized and economical process. A more detailed explanation of the complete process can be found in additional methodology documents found on the [ACR Web site](#) (see also the "Availability of Companion Documents" field).

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Description of Method of Guideline Validation

Criteria developed by the Expert Panels are reviewed by the American College of Radiology (ACR) Committee on Appropriateness Criteria.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The recommendations are based on analysis of the current literature and expert panel consensus.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Selection of appropriate radiologic imaging procedures for evaluation of acute respiratory illness in immunocompetent patients

Potential Harms

Relative Radiation Level (RRL)

Potential adverse health effects associated with radiation exposure are an important factor to consider when selecting the appropriate imaging procedure. Because there is a wide range of radiation exposures associated with different diagnostic procedures, a relative radiation level indication has been included for each imaging examination. The RRLs are based on effective dose, which is a radiation dose quantity that is used to estimate population total radiation risk associated with an imaging procedure. Patients in the pediatric age group are at inherently higher risk from exposure, both because of organ sensitivity and longer life expectancy (relevant to the long latency that appears to accompany radiation exposure). For these reasons, the RRL dose estimate ranges for pediatric examinations are lower as compared to those specified for adults. Additional information regarding radiation dose assessment for imaging examinations can be found in the American College of Radiology (ACR) Appropriateness Criteria® Radiation Dose Assessment Introduction document (see the "Availability of Companion Documents" field).

Qualifying Statements

Qualifying Statements

The American College of Radiology (ACR) Committee on Appropriateness Criteria and its expert panels have developed criteria for determining appropriate imaging examinations for diagnosis and treatment of specified medical condition(s). These criteria are intended to guide radiologists, radiation oncologists, and referring physicians in making decisions regarding radiologic imaging and treatment. Generally, the complexity and severity of a patient's clinical condition should dictate the selection of appropriate imaging procedures or treatments. Only those examinations generally used for evaluation of the patient's condition are ranked. Other imaging studies necessary to evaluate other co-existent diseases or other medical consequences of this condition are not considered in this document. The availability of equipment or personnel may influence the selection of appropriate imaging procedures or treatments. Imaging techniques classified as investigational by the U.S. Food and Drug Administration (FDA) have not been considered in developing these criteria; however, study of new equipment and applications should be encouraged. The ultimate decision regarding the appropriateness of any specific radiologic examination or treatment must be made by the referring physician and radiologist in light of all the circumstances presented in an individual examination.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Kirsch J, Mohammed TH, Kanne JP, Chung JH, Donnelly EF, Ginsburg ME, Heitkamp DE, Henry TS, Kazerooni EA, Ketani LH, McComb BL, Ravenel JG, Saleh AG, Shah RD, Steiner RM, Suh RD, Expert Panel on Thoracic Imaging. ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients. [online publication]. Reston (VA): American College of Radiology (ACR); 2013. 7 p. [19 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

1995 (revised 2013)

Guideline Developer(s)

American College of Radiology - Medical Specialty Society

Source(s) of Funding

The American College of Radiology (ACR) provided the funding and the resources for these ACR Appropriateness Criteria®.

Guideline Committee

Committee on Appropriateness Criteria, Expert Panel on Thoracic Imaging

Composition of Group That Authored the Guideline

Panel Members: Jacobo Kirsch, MD (*Principal Author and Panel Vice-chair*); Tan-Lucien H. Mohammed, MD (*Panel Chair*); Jeffrey P. Kanne, MD (*Panel Vice-chair*); Jonathan H. Chung, MD; Edwin F. Donnelly, MD, PhD; Mark E. Ginsburg, MD; Darel E. Heitkamp, MD; Travis S. Henry, MD; Ella A. Kazerooni, MD; Loren H. Ketaj, MD; Barbara L. McComb, MD; James G. Ravenel, MD; Anthony G. Saleh, MD; Rakesh D. Shah, MD; Robert M. Steiner, MD; Robert D. Suh, MD

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Kirsch J, Ramirez J, Mohammed TH, Amorosa JK, Brown K, Dyer DS, Ginsburg ME, Heitkamp DE, Jeudy J, MacMahon H, Ravenel JG, Saleh AG, Shah RD, Expert Panel on Thoracic Imaging. ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients. [online publication]. Reston (VA): American College of Radiology (ACR); 2010. 8 p.

Guideline Availability

Electronic copies: Available from the [American College of Radiology \(ACR\) Web site](#) .

Print copies: Available from the American College of Radiology, 1891 Preston White Drive, Reston, VA 20191. Telephone: (703) 648-8900.

Availability of Companion Documents

The following are available:

- ACR Appropriateness Criteria®. Overview. Reston (VA): American College of Radiology; 2013 Nov. 3 p. Electronic copies: Available in Portable Document Format (PDF) from the [American College of Radiology \(ACR\) Web site](#) .
- ACR Appropriateness Criteria®. Literature search process. Reston (VA): American College of Radiology; 2013 Apr. 1 p. Electronic copies: Available in PDF from the [ACR Web site](#) .
- ACR Appropriateness Criteria®. Evidence table development – diagnostic studies. Reston (VA): American College of Radiology; 2013 Nov. 3 p. Electronic copies: Available in PDF from the [ACR Web site](#) .
- ACR Appropriateness Criteria®. Radiation dose assessment introduction. Reston (VA): American College of Radiology; 2013 Nov. 3 p. Electronic copies: Available in PDF from the [ACR Web site](#) .
- ACR Appropriateness Criteria®. Procedure information. Reston (VA): American College of Radiology; 2013 Apr. 1 p. Electronic copies: Available in PDF from the [ACR Web site](#) .
- ACR Appropriateness Criteria® acute respiratory illness in immunocompetent patients. Evidence table. Reston (VA): American College of Radiology; 2013. 9 p. Electronic copies: Available from the [ACR Web site](#) .

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on April 3, 2006. This NGC summary was updated by ECRI Institute on July 22, 2009 and July 27, 2011. This NGC summary was updated by ECRI Institute on February 27, 2014.

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